

IN THE CLAIMS:**1. - 31. *cancelled***

32. (original) A method for processing a session in a packet-processing system, the session having a session rate, the method comprising the steps of:

determining whether the session rate matches one of a plurality of basic rates, which each basic rate associated with a respective one of a plurality of rate-specific queues; and

splitting the session, in response to a non-match of the session rate with any of the basic rates, into subsessions for queuing into at least one of the rate-specific queues.

33. (original) The method of claim 32 further comprising the step of:

queuing the session in an unsplit state, in response to a match of the session rate with any of the basic rates, into a corresponding rate-specific queue having the matching basic rate.

34. (original) The method of claim 32, wherein the step of splitting includes the step of splitting the session into subsessions wherein every subsession has an identical subsession rate.

35. (original) The method of claim 34, wherein the subsession rate matches at least one of the plurality of basic rates.

36. (original) The method of claim 35, further comprising the step of:

queuing the subsessions into a corresponding rate-specific queue having an associated basic rate matching the subsession rate.

37. (original) The method of claim 32, wherein the steps of determining and splitting are performed by a queue controller.

38. (original) The method of claim 32, further comprising the step of:
processing the session and subsessions using a per-connection-timestamp
procedure.

39. (original) The method of claim 32, further comprising the step of:
processing the session and subsessions using a no-per-connection-timestamp
procedure.

40. (original) The method of claim 32, wherein the rate-specific queues are rate
first-in-first-out (FIFO) queues.

41. - 51. *cancelled*